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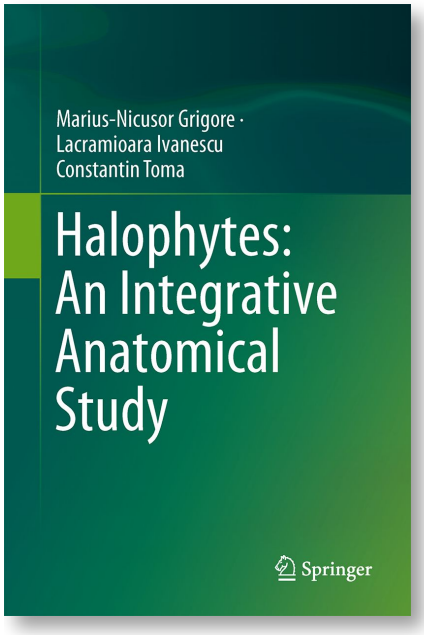
# Halophytes: An Integrative Anatomical Study

Springer

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# Halophytes: An Integrative Anatomical Study

- Unique source of detailed anatomical information on salt-tolerant plants
- More than 500 color micrographs and more than 100 original ink drawings
- Discusses links between plant morphology, anatomy, physiology and ecology of halophytes

This book focuses on morphological and anatomical strategies developed by halophytes during evolution that allow them to survive in high-salt environments. These adaptive strategies refer to well integrated structural features, such as succulence, salt secretion (salt glands and vesicular hairs), aerenchyma, Kranz anatomy, bulliform cells, successive cambia, tracheoidioblasts and endodermis with pronounced Casparian strips. The authors present cross sections of the roots, stems and leaves of 62 halophyte species belonging to 18 families from different habitats and climates (temperate, Mediterranean). They also discuss the ecological, physiological and evolutionary aspects of the various adaptive structures in an integrative way. Beginning with the structural level, this book offers novel insights into the ecology of halophytes and opens new perspectives for the identification of salt-tolerant crop plants or halophytes that can be used for ecological purposes, such as bio-remediation and revegetation.